

Bridgend Urban District.

Annual Report

OF THE

MEDICAL OFFICER

AND

INSPECTOR OF NUISANCES,

ALSO

Report on Factories and Workshops,

FOR THE YEAR 1905.

WYNDHAM RANDALL,

Medical Officer of Health.

M. WILLIAMS,

Surveyor and Inspector.

BRIDGEND:

Central Glamorgan Printing and Publishing Company, Limited.

1906.

The Bridgend Urban District Council.

To the Chairman and Members of the Bridgend Urban District Council.

GENTLEMEN,

I beg to submit to you my Twenty-First Annual Report, being that for the year 1905, and to lay before you certain Tables of Vital Statistics, together with others prescribed by, and filled up according to instructions received, from the Local Government Board: also the Reports of the Sanitary Inspectors.

THE AREA.

The result of a measurement on the basis of the most recent Ordnance Survey showed the Area of the District to contain a little more than 700 acres. Oldcastle 414 acres; Newcastle 286. This was the area up to 31st March, 1905. After this date the district was enlarged by the addition of certain portions of the two parishes of Coity Lower and Daudy.

Thus until this year the district consisted of	700.757	acres
With the added portion of Coity Lower,	438.372	acres
The added portion of Daudy	...	74.577 acres

The present district consists of	...	1213.706	acres.
----------------------------------	-----	----------	--------

The district has now been divided into three Wards named respectively, the Northern, the Southern, and the Western.

The Northern is divided from the Southern by a line drawn through the centre of Water Street, from the river along Queen Street, The Rhiw, Nolton Street, Brackla Street, and Brackla Lane. The Western consists of Newcastle Lower and the added portion of the Parish of Daudy.

Oldcastle	...	414	acres
Added portion of Coity Lower	...	438	acres
Newcastle	...	286	acres
Added portion of Daudy	...	75	acres

Density of Oldcastle, 6.53; of Newcastle, 4.73.

I am indebted to Mr. H. J. Randall, Junior, for the following description of the Topography, and Geology of the district ascertained from the most recent sources of information on the subject:—

TOPOGRAPHY.—The town of Bridgend is situate about 2 miles to the south of the Outcrop of the South Wales Coal Field, and about 4 miles north of the Bristol Channel. The river Ogmore flows through the town, dividing it into two unequal portions. The portion to the west of the river is called Newcastle, and forms part of the ecclesiastical parish of that name; that to the east is called Oldcastle. For civil purposes the Urban District now forms one parish—that of Bridgend. The river Ogmore, together with the three larger tributaries which join it north of Bridgend, rises in the coal field, and flows from north to south. It is a rapid stream, falling a considerable height in the 13 or 14 miles of its course.

GEOLOGY.—In the northern portion of the Urban District, the part bounded on the western side by the main line of the Great Western Railway and on the eastern side by the Llynfi and Ogmore Branch, the

subsoil consists of the well-known Quarella beds: a hard sandstone of Rhætic age, much used both locally and elsewhere for building purposes. A long but narrow portion of the same formation (what is called by Geologists an "inlier") extends from Coity Fields in a N.E. direction towards Coity. This inlier has been caused by the action of the Coity brook in cutting its way down through the lias and exposing the Rhætic beds which lie beneath. Of this portion there is no very good exposure, as it has not been quarried.

With the exception of these examples of the Rhætic beds, the whole of the rock underlying the Urban District consists of the Lower Lias. The beds of Lias are of the normal type, consisting of alternate beds of limestone and marl or clay. The finest exposure of these beds is in the great quarry east of the railway station. This, and the railway cutting near it, were described in detail many years ago by the well-known geologist Charles Moore. Over 80 separate beds of limestone, and an equal number of clay, are exposed in this quarry. Further east, the cutting of the Vale of Glamorgan Railway exposes another very fine section. Both here and in the railway cutting just outside Bridgend Station (as every railway traveller must have observed), the rock is much disturbed. There are several sharp undulations, the folds of which range generally east and west, and some crushing.

The soil formed by the Lias is a thick sticky clay, giving rise to very wet land, and needing a great deal of "working" to make it suitable for garden purposes.

The lower part of the town is built upon the alluvial flat formed by the Ogmore river, the soil of which is alluvium and river gravel, covering the Lias which lies underneath. A more striking feature, however, than this is the high-level gravel. Commencing outside the Urban District some distance north of the Coity Railway Junction, it forms a great flat past Quarella and Cae Vetry until it is cut through by the little valley of the Coity Brook. As soon as the influence of this valley disappears, viz., in Nolton Street, it commences again, and forms another great flat extending in a southerly direction far beyond the limits of the Urban District. Over the whole of the area covered by this deposit the soil is a light gravelly one, very different from the stiff clay of the Lias. There has been some dispute as to whether this deposit is a river gravel or not, but the better opinion is that it was formed by an effluent from the Ice Sheet at the close of the last Glacial Period.

THE POPULATION.

The population of the district, including the staff and inmates of the Workhouse, was ascertained by the result of the census to be 6,066 persons in 1901; giving an average of 4.9 persons per house in the district. An average of 4.9 persons per house in Oldcastle, and in Newcastle of 4.8. I have estimated the population for the year 1905, by multiplying the number of occupied houses in Oldcastle by 4.9; and the number in Newcastle by 4.8. This gives a population for the district of 7,022, an increase for the year of 335; Oldcastle 5,311, Newcastle 1,711, Cottage Homes 63. Total population 7,085.

The variable increase during the last 21 years renders, however, an annual estimate extremely fallacious.

I fail to understand why the Government, knowing the benefits afforded by a decennial census, inaugurated a hundred years ago, do not supplement these benefits by the introduction of a quinquennial one.

Houses occupied, &c., in the Parishes.

Parishes.	Occupied.	Vacant.	Totals.	Population.
(Cottage Homes	7	...	7)	63
Oldcastle	1084	34	1118	5311
Newcastle	349	18	367	1711
District	1433	52	1485	7085

The number of occupied houses in the district is 1,433—1,084 in Oldcastle, and 349 in Newcastle.

Houses erected, in course of erection, and closed :—

Parishes.	Houses Erected.	In course of Erection.	Closed Unfit.	Totals.	Rebuilt.
Oldcastle ...	19	7	1	27	7
Newcastle ...	8	3	5	16	...
District ...	27	10	6	43	7

BIRTHS.

The births registered during the year were 209; of these 98 were males, and 111 were females.

The rate for the first quarter of the year ending 31st March, was 26.06.

The rate for the second quarter ending 30th June, was 31.11.

The rate for the third quarter ending 30th September, was 32.63.

The rate for the fourth quarter ending 31st December, was 28.48.

The birth-rate for the year was 29.50 per 1,000.

The rate for Oldcastle, including the Workhouse, was 29.18, excluding the Workhouse 27.30; for Newcastle was 31.56.

The rate for England and Wales was 27.2.

The rate for England and Wales of the 141 Smaller Towns, was 26.9.

The births at the Workhouse were 10; of these 4 were males, and 6 were females.

Birth-rate 69.96, as compared with 57.97 in 1904; 48.38 in 1903.

Table I. shows the population, the births, the deaths, and the excess of births over deaths in successive years, within the District, including those at the Workhouse, and including the deaths of persons belonging to this district dying at the Asylum and at Cardiff.

TABLE I.

Year.	Population.	Births.	Deaths	Excess of Births.	Excess of Deaths.
1886	4414	147	87	60	Nil.
1887	4467	148	124	24	"
1888	4520	153	115	38	"
1889	4573	139	85	54	"
1890	4626	140	109	31	"
1891	4679	145	129	16	"
1892	4817	154	92	62	"
1893	4956	165	68	97	"
1894	5095	181	87	94	"
1895	5233	214	132	82	"
1896	5379	186	108	78	"
1897	5511	199	107	92	"
1898	5649	211	113	98	"
1899	5788	195	111	84	"
1900	5927	175	128	47	"
1901	6066	174	140	34	"
1902	6536	215	135	80	"
1903	6604	196	124	72	"
1904	6687	209	121	88	"
1905	7085	209	132	77	"

Table III. shows the comparisons of births and deaths in the district in following years, with annual rates per 1,000, including those at the Workhouse, and at the Asylum belonging to the district.

TABLE II.

Years.	Births.	Birth-rate per 1000 living.	Deaths from all causes.	Death-rate per 1000 living.	Zymotic Death-rate.	Death-rate under 1 year per 1000 births.		
						Bridgend D'ths. Rate.		England & Wales.
1886	147	33.3	87	19.7	1.5	18	122.4	149
1887	148	33.1	124	27.7	4.2	26	175.6	145
1888	153	33.8	115	23.2	3.1	22	143.8	136
1889	139	30.4	85	18.5	1.9	16	115.1	144
1890	140	30.2	109	21.4	2.8	24	171.4	151
1891	145	31.0	129	27.5	0.8	20	138.0	149
1892	154	32.0	92	19.0	1.0	17	110.4	148
1893	165	33.2	68	13.7	1.6	23	139.3	159
1894	181	35.5	87	17.0	0.9	18	99.4	137
1895	214	40.8	132	25.2	4.2	37	172.8	161
1896	186	34.5	108	20.0	1.3	31	166.6	148
1897	199	36.1	107	19.2	1.0	27	135.6	156
1898	211	37.3	113	20.0	1.7	26	123.2	160
1899	195	33.6	111	19.1	2.4	28	143.5	163
1900	175	29.5	128	21.5	3.2	34	194.2	154
1901	174	28.6	140	23.0	2.4	20	114.9	151
1902	215	32.8	135	20.5	2.0	32	148.8	133
1903	196	29.6	124	18.7	1.0	26	132.6	132
1904	209	29.7	121	18.0	2.4	37	177.0	146
Means of 19 years.	176.1	33.0	111.3	20.6	2.1	25.4	143.4	148.5
1905	209	29.50	132	18.63	3.10	24	114.83	128

The death-rate of infants under one year of age maintains the decline noticeable in 1901, and is the lowest, except 1892 and 1894, of the preceding nineteen years, and below the rate of 1903, and 1904.

Table III. shows the comparisons of births and deaths in the Parishes of Oldcastle and Newcastle in 1905.

TABLE III.

Year 1905.	Births.	Birth- rate per 1000 living.	Deaths from all causes.	Death- rate per 1000 living.	Zymotic Deaths, and Death- rate per 1000 living.		Death-rate under 1 year per 1000 births.	
							Bridgend	England & Wales.
Workhouse	10	69.96	(33	227.58)	...	...	...	128,
Oldcastle ...	145	29.18	81	15.07	17	3.16	138.0	141
Newcastle ...	54	31.56	32	18.76	5	2.92	74.07	smaller Towns :
District ...	209	29.50	113	15.95	22	3.10	114.83	132

The above Tables show a distinct increase of the Zymotic death-rate as compared with last year. the general death-rate is less than that of each of the preceding nine years, except 1904 and 1903, i.e., one has to go back to 1894 for a lower rate.

DEATHS.

During the year 1905, 132 deaths, including those "belonging to the district" at the Asylum, all deaths at the Workhouse, and 3 at Cardiff, were registered; of the 113 out of the above deaths "belonging to the district," 61 were males, and 52 were females.

The excess of births over deaths in the district was 77.

The crude death-rate was 18.63 per 1,000 of the population; this includes the deaths at the Workhouse, and deaths at the Asylum "belonging to the district."

The death-rate 18.63 given in Table II. is that of all deaths occurring within the district, including the Workhouse, and 3 deaths at the Asylum "belonging to the district."

The death-rate "corrected" by eliminating the deaths at the Workhouse of non-residents, and adding the deaths at the County Asylum of residents, was for the quarter ending 31st March, 19.54; for the quarter ending 30th June, 17.77; for the quarter ending 30th September, 14.96; for the quarter ending 31st December, 10.73; and for the year 1905, 15.95.

The rate for England and Wales, 15.2, is the lowest on record; in 1903 15.4 was up to that time the lowest rate recorded.

The rate for England and Wales of the 141 Smaller Towns was 14.4.

The death-rate of Oldcastle, without the deaths at the Workhouse of non-residents, and with the deaths of residents at the Asylum added, was 15.07.

The corrected rate for Newcastle was 18.76.

The deaths from the seven chief zymotic diseases during the year were 22; the death-rate per 1,000 persons living was 3.10, as compared with 2.39 in 1904, 1.06 in 1903, 3.06 in 1902, and 2.47 in 1901.

See Table II. to find rates of successive years.

The Zymotic rate for England and Wales was 1.52.

The rate for the 141 Smaller Towns was 1.50.

On adding up the rates for the earlier 10 years, in Table II., and comparing them with the later 10 years of the series, one finds that the sum of the earlier period amounts to 22.0, while that of the later comes to 20.5; on taking the later figure from the earlier we find the difference

to be 1.5, or otherwise, a decrease of 1.5 on the sum of the averages in the later period over the earlier.

The zymotic rate for Oldcastle was 3.16; Newcastle, 2.92.

Inquests were held in regard to 8 cases of sudden death, of these 1 was due to suicide, 1 was a case of cancer, 1 diabetes, 1 accident through suffocation, 1 was attributed to convulsions, 1 to apoplexy, and 1 to accident.

Seven inquests were held in Oldcastle, and one in Newcastle. The rate was 1.11 per 1,000, as compared with 1.34 in 1904, and 1.21 in 1903.

There were no deaths from puerperal fever nor parturition.

The deaths of infants under one year of age were 24. The rate per 1,000 births was 114.83.

The infant deaths in Oldcastle were 20; death-rate per 1,000 births 129.0, including births at the Workhouse, excluding 137.93.

The infant deaths in Newcastle were 4; rate per 1,000 births 74.07.

The rate was in the March quarter...	... 272.72
June quarter ...	... 125.0
September quarter ...	... 50.84
December quarter ...	... 40.0

The rate for England and Wales was 128; the rate for the 141 Smaller Towns was 132.

At the Workhouse 23 deaths were registered during the year, of these 28 were males, and 5 were females. The excess of deaths over births was 23.

The previous residents "belonging to Bridgend" dying at the Workhouse were 7 from Oldcastle, and 1 from Newcastle.

The daily average number of inmates was 145.

The death-rate was 227.58 per 1,000, as compared with 195.65 in 1904, 266.12 in 1903, 300.0 in 1902, and 333.33 in 1901.

There was no death from any of the chief zymotic diseases.

The 33 deaths at the Workhouse among an average daily number of inmates of 145, are included in the total deaths in the district, on which the crude general death-rate is based, Table II.


The "corrected" rate is based on the deaths of residents in the Urban District, with the deaths of residents at the Asylum and Workhouse added, and the deaths of non-residents at the Workhouse subtracted.

The deaths of non-residents will be found subtracted in Column 12, and the corrected death-rate in Column 13 of the Local Government Board Table I.

THE BRIDGEND URBAN DISTRICT.

Area in Acres, 1213.706.		Density, 5.84.
1891.	1901.	1905.
Population, 4,679.	Census, 6,066.	7,085 (estimated).
Birth-rate, 29.50. Death-rate, 18.63. "Corrected" rate, 15.95.		
Infant death-rate, 114.83 per 1,000 births.		

Zymotic rate, 3.10. Measles, 0.28; Whooping cough, 0.42; Enteric Fever, 2.26; Erysipelas, 0.14; Epidemic Influenza, 0.28; Diarrhœa, 0.14; Septic, 0.28; Phthisis, 1.83; Other Tubercular, 0.56; Cancer, 0.71; Bronchitis, 0.71; Pneumonia, 0.85; Pleurisy, 0.14; Other Diseases of Respiratory Organs, 0.71; Alcoholism, 0.42; Prematurity, 0.14; Heart Disease, 0.85; Accidents, 0.0; Suicides, 0.14; Digestive Diseases, 0.42; Nervous Diseases, 1.97; All Other Causes, 2.68; All Causes, 15.95.

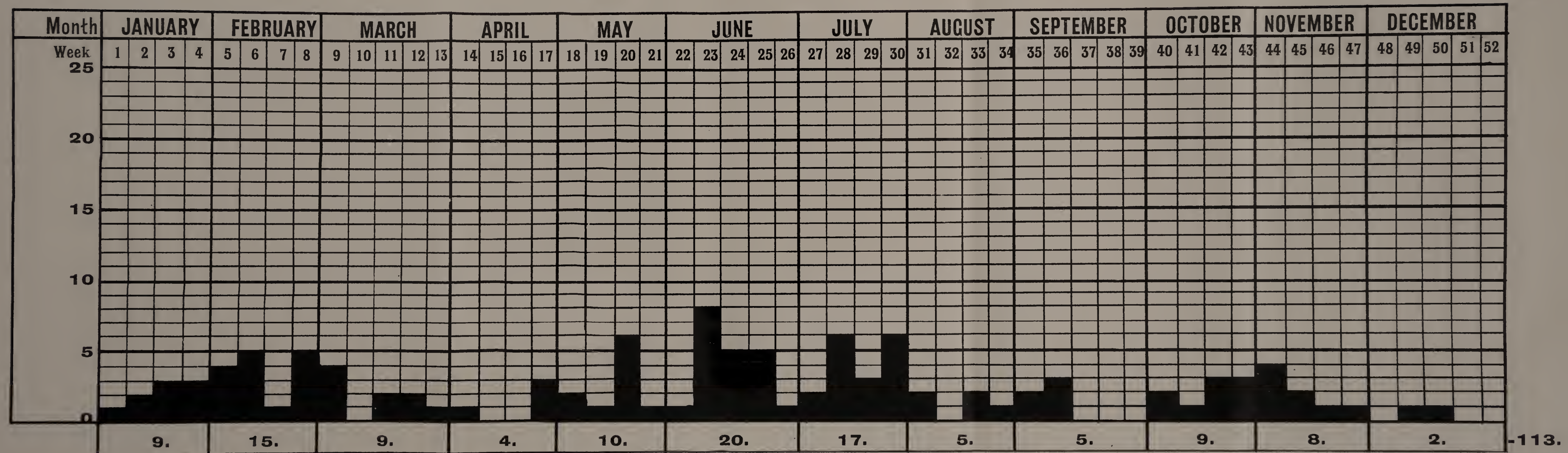


Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b2882958x>

BRIDGEND URBAN DISTRICT.

Diagram of Deaths "belonging to the District," excluding non-residents at the Workhouse.



The deaths at all ages were:—

Under one year	...	...	...	...	24
One and under five years	...	...	...	...	8
Five and under fifteen years	...	...	...	...	2
Fifteen and under twenty-five years	...	...	...	...	10
Twenty-five and under sixty-five years	...	...	...	...	41
Sixty-five years and upwards	...	...	...	...	28
					113

Table IV. shows the principal causes of deaths amongst infants under one year of age.

TABLE IV.

Causes of Deaths under One Year of age.							Deaths.
Measles	...	...	...	...	...	...	1
Whooping Cough	...	...	...	...	...	...	1
Tuberculosis	...	...	...	...	...	...	2
Zymotic Diarrhœa	...	...	...	...	...	...	1
Premature Births	...	...	...	...	...	...	1
Congenital Defect	...	...	...	...	...	...	1
Diseases of the Respiratory System	...	...	...	...	...	...	2
Diseases of the Nervous System	...	...	...	...	...	...	10
Diseases of the Digestive System	...	...	...	...	...	...	1
Pemphigus	...	...	...	...	...	...	1
Ill-defined causes, etc.	...	...	...	...	...	...	3
Total							24
Rate per 1000 persons living							3·4

Table V. shows the number of deaths registered in each parish during the year.

TABLE V.

Workhouse and Parishes.	Zymotic Diseases.	Parasitic Diseases.	Digestive Diseases.	Constitutional Diseases.	Developmental Diseases.	Local Diseases.	Violence.	Ill-defined Causes, etc.	Totals.	Death-rate per 1000.	Population of Parishes and daily average at Work-house.
Workhouse ...	(3	—	2	7	4	16	1	—	33	227·58	145)
Oldcastle ...	18	—	5	17	7	32	1	1	81	15·07	5374
Newcastle ...	7	—	1	5	2	16	—	1	32	18·76	1711
District ...	25	—	6	22	9	48	1	2	113	15·95	7085

The above is the "corrected" death-rate of the district. The crude rate is 18.63, and includes the 3 deaths at the Asylum and 3 deaths at Cardiff, "belonging to the district."

The rate for all deaths belonging to the district, and beyond the district, was 18.63.

The rate for all deaths that actually occurred within the district was 17.78. And the rate corrected by subtracting deaths not belonging to the district, and adding deaths belonging to the district taking place at the Asylum and Cardiff, was 15.95.

The crude rate for Oldcastle, including all deaths at the Workhouse, and deaths belonging to the parish elsewhere, was 18.61. The "corrected" rate was 15.07.

There was 1 Newcastle death at the Workhouse; and 2 at the County Asylum.

The "corrected" rate for Newcastle was 18.76.

ZYMOTIC DISEASES.

The 113 deaths from all causes included:—

2 attributed to Measles.

3 attributed to Whooping Cough.

16 attributed to Enteric Fever.

1 attributed to Diarrhœa.

—

22 deaths due to 4 of the seven principal zymotic diseases.

There were also 3 attributed to Epidemic Influenza,
and 1 attributed to Erysipelas.

NOTIFICATION OF INFECTIOUS DISEASE.

During the year 1905 136 cases of infectious disease were reported to me under the provisions of the Infectious Diseases Notification Act.

Table VI. shows the number of cases reported under the Notification Act, and the deaths from the same during each month of the year 1905.

In addition to the deaths shown in Table VI. there were:—3 deaths from Epidemic Influenza—2 in February, 1 in July. 1 from Whooping Cough in June and 2 in July. 1 from Diarrhœa in January; and 2 from Measles—1 in June, 1 in October.

TABLE VI.

Months. 1905.	Small-pox		Diphtheria		Scarlet Fever		Enteric Fever		Erysipelas		Totals	
	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases
January	1	2	..	..	1	2
February	2	..	3	1	5	..	2	1	12
March	2	..	5	..	..	..	7
April
May	23	..	1	..	24
June	9	53	..	..	9	53
July	4	14	..	..	4	14
August	1	..	6	..	2	..	9
September	2	..	4	..	..	..	6
October	1	4	..	..	1	4
November	2	..	2
December..	1	..	..	..	1	1	1	1	3
Year 1905				3		8	16	117	1	8	17	136
Rate per 1000 persons.				0.42		1.13	2.26	16.51	0.14	1.13	2.40	19.19

Table VII. shows the distribution of notified infectious diseases, and deaths due to the same, in each parish.

TABLE VII.

Parishes.	Small-pox		i phtheria		Scarlet Fever		Enteric Fever		Erysipelas		Totals	
	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases
Oldcastle	3	..	8	13	97	..	5	13	113
Newcastle	0	3	20	1	3	4	23
District				3		8	16	117	1	8	17	136

In addition to the above there were:—

In Oldcastle—2 deaths from Measles; 1 from Whooping Cough; 1 from Influenza, and 1 from Diarrhœa. Newcastle—1 from Influenza; 2 from Whooping Cough, and 1 from Erysipelas. These diseases are not notifiable.

Table VIII. shows the deaths that occurred during the years 1886 to 1892; and the notifications received, with the deaths that occurred during the years 1893 to 1905, inclusive, from infectious diseases (including the cases and deaths at the Workhouse). The Notification Act was adopted by the Authority in July, 1893.

TABLE VIII.

Year.	Popu- lation.	Small Pox.		Scarlet Fever.		Diph- theria.		Mem- branous Croup.		Enteric Fever.		Contin'd Fever.		Measles		Whoop- ing Cough.		Diarrhoea		Death- rate of 7 principal Zymotic Diseases.		Puerp'ral Fever.		Ery- sipelas.	
		D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	Per 1090.	D'ths.	Cases.	D'ths.	Cases.	D'ths.
1881	4150																								
1886	4414					1				2		1				2		1		1.5					
1887	4467							5		6		1				1		1		4.2					
1888	4520							4		1										3.1					
1889	4573					1				4						1		2		1.7					
1890	4626					2				1		1				2		1		2.6					
1891	4679																			0.8					
1892	4817					1				2						3		1		1.0					
* 1893	4956	1	2		4		7	1	1	6			10				2			1.6					
1894	5095					1				3			8					1		0.9					
1895	5233					1		1		4			3			7		2		4.2					
1896	5379	1	21		32		10			2						2		2		1.3					
1897	5511		4		20		32			2						1		3		1.0					
1898	5649				13		20			5						5				1.7					
1899	5788				15		13			11						2		2		2.4					
+ 1900	5927		1		7	3	11			3						1		3		3.2					
1901	6066				27	5	29			2						4		4		2.4					
1902	6536	1	2		14	2	10			3								3		3.0					
+ 1903	6604				17	2	16			3						1		1		1.0					
1904	6687		1		18		6			3						2		11		2.4					
\$ 1905	7085				8		3			16						3		1		3.1					

* Notification Act 1889, adopted July, 1893. + In 1900 Diphtheria and Membranous Croup were conjoined, as to Notifications and Deaths.

+ Sewerage Scheme, and work of connecting the Houses, completed. § Filter Beds on Water Supply completed and utilized.

Table VIII. shows the comparison of prevalence per 1,000 of population of deaths from infectious diseases from 1886 to 1892, inclusive; and the prevalence per 1,000 of cases notified, with the prevalence of deaths that occurred during the years 1893 to 1905, inclusive; with the cases and deaths at the Workhouse.

TABLE VIII.

Year.	Popu- lation.	Small Pox.		Scarlet Fever.		Diph- theria.		Mem- branous Group.		Enteric Fever.		Contin'd Fever.		Measles.		Whoop- ing Cough.		Diarr- hoea.		Death- rate of 7 principal Zymotic Diseases.		Puer- peral Fever.		Ery- sipelas.	
		D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	D'ths.	Cases.	Per 1000.	D'ths.	Cases.	D'ths.	Cases.	D'ths.
1881	4150																								
1886	4414					0.22				0.45		0.22				0.45		0.22		1.5					
1887	4467			1.11				1.11		1.34		0.22				0.22		0.22		4.2					
1888	4520							0.88		0.22				1.32				0.66		3.1		0.22			
1889	4573					0.21				0.87						0.21		0.43		1.7				0.21	
1890	4626			0.86		0.43				0.21		0.21		0.21		0.43		0.21		2.6		0.21			
1891	4679			0.21												0.64				0.8		0.21			
1892	4817			0.41		0.20				0.41								0.20		1.0		0.20			
1893	4956	0.20	0.40		0.80		0.40	0.20	0.20	1.21	5.64		2.01					0.40		1.6					
1894	5095				1.37	0.19	1.37			0.58	2.74		1.57					0.19		0.9				0.19	
1895	5233				1.91	0.19	1.14	0.19		0.76	2.29		0.57	1.33		1.33		0.38		4.2				0.76	
1896	5379	0.18	3.90		5.94					0.37	4.27					0.37		0.37		1.3					0.92
1897	5511		0.72		3.62		0.90			0.36	3.44					0.18		0.54		1.0					1.26
1898	5649				2.30					0.88	8.56					0.88				1.7				0.53	
1899	5788				2.59					1.90	13.47							0.34		2.4				0.34	
1900	5927		0.16		1.18	0.50	1.85			0.50	4.38			1.51		0.16		0.50		3.2		0.16		0.16	0.16
1901	6066				4.45	0.82	4.78			0.32	5.25					0.65		0.65		2.4		0.16		0.16	1.97
1902	6536	0.15	0.30	0.15	2.14	0.30	1.53			0.49	3.36			1.53						3.0					0.76
* 1903	6604				2.57	0.30	2.42			0.45	2.72					0.15		0.15		1.0				0.15	0.45
1904	6687		0.15		2.69		0.89			0.45	2.84					0.29		1.64		2.4					0.60
† 905	7085				1.13		0.42			2.26	15.51			0.28		0.42		0.14		3.1				0.14	1.13

* Sewerage completed. † Filter Beds completed.

Table IX. shows the deaths from certain other diseases, and injuries from 1886 to 1904.

The Tables VIII. and VIIIA., IX. and IXA., contain a complete record of the notifications received and deaths, with their prevalence per 1,000 of the respective diseases dealt with, during the years I have held the position of Medical Officer, of Health of this District.

TABLE IX.

Year.	Influenza.	Septic Diseases.	Rheumatic Fever.	Phthisis.	Other Tubercular Diseases.	Respiratory * Diseases.	Other Respiratory Diseases.	Cardiac Diseases.	Malignant Diseases.	Alcoholism and Cirrhosis of Liver.	Parturition.	Nervous Diseases.	Injuries.
1886	::	::	::	6	9	18	::	8	5	1	1	15	2
1887	::	1	::	8	5	26	1	7	5	4	2	13	8
1888	::	3	2	3	2	16	4	13	2	3	5	19	4
1889	::	::	::	7	3	18	::	6	1	3	::	13	4
1890	::	::	2	7	5	30	1	5	8	3	2	11	5
1891	5	1	1	11	4	30	1	6	2	3	1	21	12
1892	5	::	::	6	5	12	::	7	5	7	1	13	6
1893	2	::	::	8	5	12	::	8	4	2	::	20	4
1894	::	::	::	11	4	23	1	10	4	2	::	13	4
1895	2	::	::	8	11	19	1	12	6	2	1	28	5
1896	2	1	::	10	6	15	1	8	4	2	1	14	8
1897	1	::	::	8	3	25	2	14	7	1	::	11	4
1898	4	1	3	8	3	26	3	3	6	2	1	15	1
1899	3	1	::	7	4	17	::	8	4	1	3	12	3
1900	2	::	::	9	2	18	1	10	6	1	1	31	2
1901	1	1	::	10	::	31	3	11	5	2	1	17	6
1902	::	3	1	10	4	30	1	9	4	2	2	27	3
1903	3	::	::	7	6	13	4	12	8	1	::	19	5
1904	3	::	::	8	2	9	4	8	8	2	::	14	6
1905	3	2	::	13	4	11	5	6	5	3	::	14	1

Table IXA. gives the comparison of prevalence per 1,000 of the above deaths in Table IX.

TABLE IXA.

Year.	Influenza.	Septic Diseases.	Rheumatic Fever.	Phthisis.	Other Tubercular Diseases.	Respiratory Diseases.	Other Respiratory Diseases.	Cardiac Diseases.	Malignant Diseases.	Alcoholism and Cirrhosis of Liver.	Parturition.	Nervous Diseases.	Injuries.
1886	...	...	...	1.35	2.04	4.07	...	1.81	1.13	0.22	0.22	3.39	0.45
1887	...	0.22	...	1.79	1.11	5.82	0.22	1.56	1.11	0.89	0.44	2.91	1.79
1888	...	0.66	0.44	0.66	0.44	3.53	0.88	2.87	0.44	0.66	1.10	4.20	0.88
1889	...	...	...	1.53	0.65	3.91	...	1.31	0.21	0.65	...	2.84	0.57
1890	...	...	0.43	1.51	1.08	6.48	0.21	1.08	1.72	0.64	0.43	2.37	1.08
1891	1.06	0.21	0.21	2.35	0.85	6.41	0.21	1.28	0.42	0.64	0.21	4.48	2.56
1892	1.03	...	...	1.24	1.03	2.49	...	1.45	1.03	1.45	0.20	2.74	1.24
1893	0.40	...	...	1.61	1.00	2.42	...	1.61	0.80	0.40	...	4.03	0.80
1894	...	...	...	2.15	0.78	4.51	0.19	1.96	0.78	0.39	...	2.55	0.78
1895	0.38	...	...	1.52	2.10	3.63	0.19	2.29	1.14	0.38	0.19	5.35	0.95
1896	0.37	0.18	...	1.85	1.11	2.78	0.18	1.48	0.74	0.37	0.18	2.60	1.48
1897	0.18	...	...	1.41	0.54	4.53	0.36	2.53	1.26	0.18	...	1.99	0.72
1898	0.70	0.17	0.53	1.41	0.53	4.60	0.53	0.53	1.06	0.35	0.17	2.83	0.17
1899	0.51	0.17	...	1.20	0.69	2.93	...	1.39	0.69	0.17	0.51	2.07	0.51
1900	0.33	...	...	1.51	0.33	3.03	0.16	1.72	1.01	0.16	0.16	5.22	0.33
1901	0.16	0.16	...	1.64	...	5.11	0.49	1.81	0.82	0.32	0.16	2.80	0.98
1902	...	0.45	0.15	1.53	0.61	4.58	0.15	1.57	0.61	0.30	0.30	4.13	0.45
1903	0.45	...	...	1.06	0.90	1.97	0.60	1.81	1.21	0.15	...	2.87	0.75
1904	0.45	...	...	1.20	0.29	1.34	0.60	1.20	1.20	0.29	...	2.09	0.89
1905	0.42	0.28	...	1.83	0.56	1.55	0.71	0.85	0.71	0.42	...	1.97	0.14

* Bronchitis and Pneumonia.

The following Four Tables are forms forwarded by the Local Government Board to be filled up with the specified Local Statistics of the District.

Local Government Board TABLE I. *Bridgend Urban District.*

YEAR	Population estimated to middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED					Tot. l Deaths in Public Institutions in the District	Deaths of Non-residents registered in public Institutions in the District	Deaths of Residents registered in Public Institutions beyond the District	Nett Deaths at all ages belonging to the District.		
		Number	Rate *	Under 1 year of age	At all Ages		Number	Rate *				Number	Rate *	
					Rate per 1000 births registered	Rate *								Rate *
1	2	3	4	5	6	7	8	9	10	11	12	13		
1895	5233	214	40.8	37	172.8	132	25.2	19	14	5	123	23.50		
1896	5379	186	34.5	31	166.6	108	20.0	15	9	2	101	18.77		
1897	5511	199	36.1	27	135.6	107	19.2	25	16	1	92	16.67		
1898	5649	211	37.3	26	123.2	113	20.0	20	10	2	105	18.58		
1899	5788	195	33.6	28	143.5	111	19.1	23	14	5	102	17.62		
1900	5927	175	29.5	34	194.2	128	21.5	28	19	4	113	19.06		
1901	6066	174	28.6	20	114.9	140	23.0	40	28	6	118	19.45		
1902	6536	215	32.8	32	148.8	135	20.6	36	25	6	116	16.21		
1903	6604	196	29.6	26	132.6	124	18.7	33	26	2	100	15.14		
1904	6687	209	29.7	37	177.0	120	18.0	27	15	1	106	15.85		
Average for Years 1895 to 1904	5938.0	197.4	33.2	29.8	152.9	121.8	20.5	26.6	17.6	3.4	107.6	18.08		
1905	7085	209	29.50	24	114.83	132	18.63	33	25	6	113	15.95		

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

Area of District in acres (exclusive of area covered by water) 1213. Density per acre—1901, 8.66 ; 1905, 5.84. Total population at all ages, 6056. Number of inhabited houses, 1233. Average number of persons per house, 4.9—At Census of 1901. Institutions within the District receiving sick and infirm persons from outside the District—The Workhouse. Institutions outside the District receiving sick and infirm persons from the District—The County Asylum. Other Institutions, the deaths in which have been distributed among the several localities in the District—The Cottage Hospital.

Acres—700.757 ; added Coity Lower—438 372 ; added Daudy—74 577. Total—1213 706.

LOCAL GOVERNMENT BOARD.—TABLE II.
Bridgend Urban District.

Names of Localities.	1.—OLDCASTLE.				2.—NEWCASTLE.			
	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
1895	3894	154	103	31	1341	60	29	6
1896	4001	144	86	24	1373	42	22	7
1897	4108	158	91	22	1405	41	16	5
1898	4215	150	90	21	1437	61	23	5
1899	4322	147	87	22	1469	48	24	6
1900	4428	133	100	28	1501	42	28	6
1901	4534	128	124	16	1532	46	16	4
1902	4875	174	86	23	1660	41	30	9
1903	4924	151	76	22	1680	45	24	4
1904	5017	149	80	26	1670	60	26	11
Averages of Years 1895 to 1904.	4431·8	148·8	82·3	23·5	1506·8	48·6	23·8	6·3
1905	5374	155	81	20	1711	54	32	4

LOCAL GOVERNMENT BOARD.—TABLE III.
Cases of Infectious Disease notified during the Year 1905.

NOTIFIABLE DISEASE.	Cases notified in whole district.							Total Cases notified in each locality.	No. of Cases removed to Hospital from each Locality.	
	At Ages—Years.									
	At all Ages									
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards			
								W		
								Oldcastle	Newcastle.	
Diphtheria ..	3	..	1	1	1	..	3	3	3	..
Erysipelas ..	8	..	1	1	..	4	3	5	3	..
Scarlet Fever ..	8	..	1	7	..	..	..	8	..	..
Enteric Fever ..	117	..	4	66	21	26	..	97	20	..
Totals ..	136	..	6	75	22	30	3	113	23	..

No Isolation Hospital erected.

LOCAL GOVERNMENT BOARD.—TABLE IV.

Causes of, and Ages at, Death during Year 1904.

CAUSES OF DEATH.	Deaths in or belonging to whole District at subjoined Ages.								Deaths in localities at all ages.					Total Deaths in public institut'ns in the district
	All ages	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Rate per 1000.	Oldcastle	Rate per 1000	Newcastle	Rate per 1000		
Small Pox ... ..	...	...	...	...	...	...	...	0.28	2	0.37	...	...	...
Measles	2	1	1	...	...	...	...	0.28	2	0.37	...	...	...
Scarlet fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping-cough... ..	3	1	2	...	...	...	...	0.42	1	0.18	2	1.16	...
Diphtheria and mem- branous croup ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever } Typhus ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
} Enteric	16	...	...	1	6	9	...	2.26	13	2.42	3	1.75	...
} Other continued ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic influenza	2	...	1	...	...	1	...	0.28	1	0.18	1	0.58	3
Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	1	1	...	...	...	...	...	0.14	1	0.18	...	...	...
Enteritis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	1	...	...	...	...	...	1	0.14	...	...	1	0.58	...
Other septic diseases	2	...	...	...	...	2	...	0.28	2	0.37	...	...	...
Phthisis	13	1	...	...	3	8	1	1.83	10	1.86	3	1.75	6
Other tubercular dis- eases	4	1	1	1	1	...	..	0.56	4	0.74	...	...	1
Cancer, malignant dis- ease	5	...	...	...	...	4	1	0.71	3	0.56	2	1.16	...
Bronchitis	5	1	...	...	...	...	4	0.71	3	0.56	2	1.16	2
Pneumonia	6	1	2	...	...	1	2	0.85	3	0.56	3	1.75	1
Pleurisy	1	...	...	...	...	1	...	0.14	1	0.18	...	...	...
Other diseases of Respi- ratory organs	5	1	...	...	...	2	2	0.71	3	0.56	2	1.16	1
Alcoholism ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver } 1	3	...	...	...	...	3	...	0.42	3	0.56	...	...	2
Venereal diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature birth	1	1	...	...	...	...	...	0.14	1	0.18	...	...	...
Diseases and accidents of parturition ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart diseases	6	...	1	...	...	2	3	0.85	2	0.37	4	2.34	5
Accidents ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1
Suicides	1	...	...	...	...	1	...	0.14	1	0.18	...	...	...
Digestive diseases	3	1	...	...	...	1	1	0.42	2	0.37	1	0.58	...
Nervous diseases	14	10	..	...	...	1	3	1.97	11	2.04	3	1.75	1
All other causes	19	4	...	...	...	5	10	2.68	14	2.60	5	2.92	10
All causes	113	24	8	2	10	41	28	15.95	81	15.07	32	18.76	33	

TABLE V.—BRIDGEND URBAN DISTRICT. INFANTILE MORTALITY DURING THE YEAR 1905
Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes.	{ Certified Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	124 4
Common Infectious Diseases.	{ Measles .. Whooping Cough Diarrhoea, all forms Enteritis (<i>not Tuberculous</i>) Gastritis, Gastro-intestinal Catarrh }	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Diarrhoeal Diseases.	{ Premature Birth Congenital Defects Atrophy, Debility, Marasmus Tuberculous Diseases Meningitis (<i>not Tuberculous</i>) Convulsions Bronchitis Pneumonia Suffocation, overlaying Other Causes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Wasting Diseases.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		3	2	2	1	8	5	1	2	2	1	1	1	1	..	..	2	24

District of Bridgend. Population (estimated to middle of 1905), 7,085. Births in the year (legitimate and illegitimate), not known. Deaths from all Causes at all Ages, 113.

SCARLET FEVER.

No death from Scarlet Fever was registered.

For England and Wales the death-rate was 0.11. For the 141 Towns the rate was 0.11.

The number of cases certified was 8, as compared with 18 in 1904, 17 in 1903, 14 in 1902, 27 in 1901, and 7 in 1900.

The case-prevalence was 1.13 per 1,000; 2.69 in 1904; 2.57 in 1903.

DIPHTHERIA.

No death was due to Diphtheria, as compared with none in 1904, 2 in 1903, 2 in 1902, 5 in 1901, and 3 in 1900.

The death-rate was 0.0 per 1,000; also in 1904; 0.30 in 1903.

The rate for England and Wales was 0.16.

The rate for the Smaller Towns was 0.15.

The case-fatality was 0.0 per cent.; also in 1904; 12.5 per cent. in 1903; in 1902 it was 20 per cent.

The number of cases was 3, as compared with 6 in 1904, 16 in 1903, 10 in 1902, 29 in 1901, and 11 in 1900.

The case-prevalence was 0.42 per 1,000; 0.89 in 1904; 2.42 in 1903.

ENTERIC FEVER.

Sixteen deaths were caused by Enteric Fever, as compared with 3 in 1904, 3 in 1903, 3 in 1902, 2 in 1901, and 3 in 1900.

The death-rate was 2.26 per 1,000; 0.45 in 1904; 0.45 in 1903.

The rate for England and Wales of "Fever" was 0.09.

The rate for the 141 Smaller Towns was 0.13.

The case-fatality was 13.6 per cent., as compared with 15.8 per cent. in 1904, 16.6 per cent. in 1903, 13.6 in 1902, 6.2 in 1901, 11.1 in 1900, and 14.1 in 1899.

The death-rate remains at twenty-five times as heavy as that of England and Wales for "Fever."

Taking the figures for Enteric Fever in Table VIIIA. and comparing the sum of the death-prevalence per 1,000 in the 10 earlier years with the sum of the 10 later years, one finds that the difference is only 2.13, so that the excess of prevalence in the latter series is as much as 2 deaths per 1,000, or equal to a difference of 20 deaths in 10,000.

The death-prevalence, therefore, may be considered to be unaltered since 1886.

Taking the thirteen years, during which notification of cases has been compulsory, and contrasting the earlier six and a half years with the later six and a half years, one finds that the sum of the prevalence per 1,000 of the earlier period equals 33.67, and that of the later period 41.79; but taking into consideration the exceptional prevalence of the year 1905 in the latter series, the difference, 8.12 is not of much significance.

The case-prevalence, therefore, may be considered to be little altered for the better during the series of years since 1893.

The incidence and distribution of cases were closely similar to the preceding years.

Last year—April and November were free from cases of Enteric Fever; the cases were diffused widely in different parts of the town.

Enquiries into the question of the antecedent partaking of shell-fish produced negative results: and in the matter of milk supply it was found that in only a few instances was the milk derived from the same source; in all other cases milk was obtained from a separate source. The results of these enquiries negative the presumption of either of these articles of food being in default.

An additional Sanitary Inspector was appointed in July. The paramount necessity for his appointment is shown by the figures of his report. Out of the first 111 houses inspected 110 notices were served to repair defective drains, and up to the end of the year 224 notices were served out of 241 houses inspected. (See Inspector's Report, Page 30.)

SPECIAL REPORT PRESENTED 9TH JUNE, 1905.

I desire to report the excessive prevalence of Enteric Fever at Bridgend.

As you may be aware Enteric Fever may be said to be endemic in this town.

The cases notified during this year were:—January, 2; February, 5; March, 5; April, none; May—the first case was notified on the 20th, and there were in all 23 cases in that month. During the month of June 53 cases were certified. Deaths:—1 January, 1 February, and 1 in June during the existence of the excessive prevalence since May. The cases are distributed all over the town, by far the majority in well built houses of the artizan class, two or three in cottages of inferior class, and half a dozen in houses of the well-to-do. Two of these cases were certified from Cardiff.

The water supply is plentiful, but the Bacteriologist's report received the end of December, 1904, was hardly satisfactory. "Typical B. Coli were present in $\frac{1}{2}$ c.c. and 2 c.c." A water showing distinct evidence of contamination.

(The construction of a reservoir and filter beds is now completed. Filtered water has been supplied to the town from 20th June.)

The sewerage of the district has recently been finished, and the whole of the house drains have been connected to the new sewers.

The disposal of excrement is by means of water-closets connected with the sewers which discharge into the sea. Some repairs have been necessary to the main sewer, and for a time the sewage has been discharged into the river about a mile and a half below the town.

The measures taken by the Council on the advice of the Medical Officer of Health, have been the watering of the streets with water containing disinfectant; the premises in each case, when notified, are visited, inspected, and the house drains flushed with disinfectant; disinfectants are left at the house with instructions as to the disinfection of the excreta, and a leaflet of general advice.

The Medical Officer also has drawn up a leaflet which has been printed, and this was distributed to all houses infected, or otherwise.

[COPY OF LEAFLET.]

Hints to All Inhabitants. How to Avoid Typhoid Fever.

As Typhoid Fever is prevalent in the Town, one or two suggestions may not be held to be superfluous, although possibly well known to many of you. The infective material of Enteric Fever enters through the mouth. It follows, therefore, that exceptional care should be devoted to the absolute cleanliness and freedom from possible pollution of everything that enters into the mouth, or is likely to come into contact with the lips. All Food, in consequence, should be kept as clean as possible and protected from dust and flies, but not kept in sculleries nor in proximity to drains and sinks.

The temperature of the boiling point of water will destroy the infective material; so it follows that Milk should be Boiled for some minutes previous to consumption. Water should be Boiled for the same time before being drunk. Both should be stored in a vessel with a porous covering, such as a clean cloth, after boiling, in a cool, clean place until needed for use.

Other foods should be partaken of so soon after they have been subjected to a high temperature as is possible: if stored for any time, protection from dust and flies should be seen to. Vegetables should be Boiled before being eaten.

Salads are perhaps better avoided, unless their source and storage are above suspicion.

Fruit, such as Apples, etc., should be Peeled before being enjoyed. The hands should be thoroughly washed before meals, and before drinking anything.

Any ground adjacent to the House, capable of giving off dust should be thoroughly soaked with water containing the disinfectant "Cyllin," or freely sprinkled with Lime Chloride, at frequent intervals while the weather remains dry.

Drains, sinks and gulley-traps should be flushed with the disinfectant twice daily or oftener.

Immediate Notice should be given to the Sanitary Inspector of any defect in the drains or of defective flushing tanks.

Cleanliness, fresh air, and temperance in all things, are important adjuncts in protection from infection.

WYNDHAM RANDALL,

6th June, 1905.

Medical Officer of Health.

Milk: As regards this, of the 13 first cases notified 11 had separate milk supplies. This proportion holds good roughly for the other cases.

Samples of milk, and water, have been forwarded to the County Analyst for examination and report. Typical *Bacillus Coli* found in 10 c.c. after filtration of the water.

The results of inspection of the infected premises were the discovery of local sanitary defects, e.g., 30 defective sink traps, 27 unpaved back yards, and 224 defective drains out of 241 houses inspected.

I am inclined to attribute the outbreak to the excessive dryness of the early months of the year, indirectly, leading, in some way, to the specific pollution of food; and I cannot exclude the water from suspicion by reason of the unsatisfactory results of bacteriological analyses.

Bridgend 31st July, 1905.

Since the above Special Report of the 9th June, 1905, I think I am justified in stating that the epidemic of Enteric Fever has assumed a more favourable aspect.

To recapitulate, to some extent, may tend to give a more satisfactory and broader view of the circumstances and incidence of the outbreak of epidemic prevalence.

I propose to divide the incidence of Enteric Fever during the year into two periods, first that from the beginning of the year until the end of March—the endemic period; and second, that from May until 31st July—the epidemic period.

								Deaths.
January	...	1st week	..	1 case	Enteric	Fever	notified	...
	...	4th week	...	1	"	"	"	1
February	...	1st week	...	3	"	"	"	...
	...	3rd week	...	2	"	"	"	...
March	...	2nd week	...	2	"	"	"	..
	...	3rd week	...	2	"	"	"	...
	...	4th week	...	1	"	"	"	...
May	...	3rd week	...	1	"	"	"	...
	...	4th week	...	7	"	"	"	...
	...	5th week	...	15	"	"	"	...
June	...	1st week	...	11	"	"	"	1
	...	2nd week	...	13	"	"	"	2
	...	3rd week	...	19	"	"	"	2
	...	4th week	...	6	"	"	"	2
								(1 at Cardiff)
	...	5th week	...	4	"	"	"	...
July	...	1st week	...	4	"	"	"	1
	...	2nd week	...	3	"	"	"	...
	...	3rd week	...	4	"	"	"	...
	...	4th week	...	3	"	"	"	1

For the remainder of the cases during the year see Table VI., Page 9.

One or more hypotheses were considered in relation to the incidence and causation of the outbreak.

The question of infected milk supply, and of the consumption of fish and shell fish has been already dealt with.

A hypothesis, widely promulgated, was that gravel from the river having been used for the purpose of binding the road metal, this gravel held the *Bacillus Typhosus*, and being ground to dust on the roads during the dry weather, was blown by wind into the houses, and, presumably, by infecting food caused infection, or by obtaining access to the water pipes through the bell traps.

As the result of inspection of the infected premises a list of the Streets on which the river gravel was used for binding the road metal, was prepared, with the accompanying results:—

There were 15 cases in roads maintained by the County Council where no gravel was used for binding;

27 cases in roads repaired by the Urban Council on which no river gravel was used;

16 cases in roads where river gravel was used for binding.

These facts do not tend to bear out that hypothesis.

Another suggestion was that some time ago the Bridgend Water Company, having completed their filter-beds, filled them, and supplied the town from them. That the immediate effect of this was that the increased pressure broke numberless house-connections all over the town, and that water contaminated with sewage matter, probably, in consequence, gave rise to the Typhoid.

If the epidemic could be traced, definitely, to affect in the great majority of instances the street, or set of streets, where the pipes had been broken, it would give some weight to this view of the mode of water-contamination.

I was informed that "the water had been turned on from the New Reservoir for the purpose of testing pressures, etc., but that there had not been a single burst pipe nor blown joint as the result throughout the entire district of supply. The breakages of pipes discovered and repaired during the last three months, March April and May, have not been excessive nor above the normal.

Breakages of pipes cannot be associated with the outbreak of Fever.

So long as a broken pipe is under pressure and water issuing it is practically impossible for any pollution to enter; while in case of turning off water for the repair of such pipes, it is the invariable rule and care on the part of the Water Company to see that before the water is cut off from flowing out of the broken pipe the space surrounding the leakage is cleared of all soil and the pipe fully exposed.

The broken and repaired water service pipes during the three months were 4." There were six cases of Enteric Fever in the streets supplied by such mains.

The result of enquiry was that 4 service pipes were repaired in 4 streets, from which streets 6 cases were notified.

In one of these streets 3 cases occurred;

In another 2 cases;

In another 1 case;

In the fourth no case.

All the other cases were notified from streets where no repairs of pipes were required.

7 per cent. in the incriminated streets;

93 per cent. in the remainder.

The water supplied to the town by the Gas and Water Company is derived from springs which issue from the Carboniferous Limestone at the base of a hill and on the bank of a mill-race that joins the river Ewenny, and near the junction of the Ewenny with the Ogmore river.

The water issues from these springs at considerable pressure, and is collected in a natural basin of rock, from which the water was pumped to Bridgend.

Dr. Bulstrode in his report dealing with this subject, says: "The

limestone rocks in the vicinity are extensively fissured, and near to the basin are numerous strong springs breaking out by the side of, and in the bed of, the mill-race which passes the basin. In the stream within a very short distance of the basin is a powerful spring rising vertically from the bed of the river, and Mr. Dyer, the manager of the Water-works, tells me that on one occasion he introduced an iron rod over 30 feet in length into this spring, and that he was unable to reach the bottom. Apparently there is an extensive fissure hereabouts through which this voluminous spring breaks forth. So, too, a little lower down a strong streamlet may be seen issuing through a wide fissure in the limestone and entering the stream at right angles to its course." Elsewhere, he says: "The inference is that the discolouration is caused by the carriage of suspended matter through the fissured limestone rocks by the percolation of the rainfall, or possibly by the escape of flood or river water into the fissures communicating with the spring."

The pressure at which the water issues from the rock at the source of the water supply has suggested the idea of the existence of an underground reservoir, within the hill from which the Schwyl springs emerge; whether this is the case or not, there is no doubt that numerous springs, which may be seen after heavy rain, find their exit from the hill both higher up the valley above Schwyl and below nearer the sea at various levels above and below the level of the collecting basin at the Water-works.

Now after a period of dry weather this supposed reservoir, or at any rate the springs, from which the waterworks receive their supply, may have the general level of the underground water so lowered as to be below the level of an incoming high spring tide; in this case the waters of the two rivers might be dammed back so as to gain entrance to the water supply through the springs below the level of Schwyl, and if the water of either river were at the time in a foul state might give rise to specific pollution of the springs from which the Bridgend water supply is derived, and be pumped up to the town in due time.

2nd May this year the sewage was turned into the river Ogmore near New Inn Bridge for the purpose of constructing outlets and cleaning the syphons of the main sewer at the River Crossing.

15th May, 1905, this was discontinued, and the sewage flowed through the sewer.

16th May the sewage was turned into the river, near the salmon weir, below Merthyr-mawr; on 9th June the sewage was turned back into the sewer.

No sewage has been turned into the river since that date.

Cases of Enteric Fever were present during the end of 1904 and the early months of this year.

Two cases were notified on 25th and one on 28th March, and two others earlier in March.

Is it reasonable to suppose that *Bacillus Typhosus* (whose tenacity of life is said to be small) could be washed down the river, meet an incoming high tide, be dammed back into the springs, be pumped up to the town, and so cause an outbreak of epidemic fever?

The first case was certified 18th May. Notification rarely takes place until some days after the onset of the disease, say 10 or 11 days: this with the period of incubation (10 or 11 days) would mean about three weeks from the date of infection, and would throw back the date of the required pollution of the river to a time near but somewhat anterior to the 2nd May when the sewage first entered the river.

One would be rather disposed to place the date of pollution at about the 28th or 27th of April to fit in with the date of the notification of the earliest cases in May.

An exceptionally high spring tide occurred about the 21st April.

In addition is it possible to think that the Bacilli could preserve their life and virulence under the circumstances and during the time necessary to fulfil the requirements of this hypothesis?

Moreover if the tidal water were mixed with the spring water one would expect a brackish taste in the water delivered to the consumers; I have not heard of this being noticed for many years.

In July, 1904, a leakage was discovered in the sewer not far from the sea at Ogmore; this leakage has continued until July this year. Communications with the Local Government Board have taken place on the subject, and after the lapse of over a twelvemonth sanction to borrow money in order to lay iron pipes instead of the present ware pipes has been granted.

Of 90 cases of Enteric Fever (during the epidemic period) single cases occurred in 59 houses, 2 cases in each of 12 houses, 3 cases in one house, and 4 cases in one house.

Secondary cases began to appear so early as the 3rd June.

The houses in which multiplied cases occurred were:—

13, Angel Street	...	1st, 25th May	...	M. S.	...	
	...	2nd, 14th June	...	E. S.	...	Sisters,
Fairlawn, Coity Road	...	1st, 27th May	...	D. F.	...	
	...	2nd, 3rd June	...	A. F.	...	Brothers.
7, Suffolk Street	...	1st, 27th May	..	T. B.	...	
	...	2nd, 14th June	...	F. A. B.	...	Brothers.
38, Clifton Terrace	...	1st, 28th May	...	L. R.	...	
	...	2nd, 2nd July	...	G. R.	...	Sisters.
16, South Street	...	1st, 29th May	...	J. M.	...	
	...	2nd, 3rd June	...	T. M.	...	Brothers.
52, Mackworth Street	...	1st, 31st May	...	W. W.	...	Brother.
	...	2nd, „	...	M. W.	...	Sister.
	...	3rd, 7th June	...	E. W.	...	Mother.
	...	4th, 31st July	...	V. W.	...	Daughter.
Laburnums, Merthyr- mawr Road	...	1st 1st, „	...	J. O. W.	...	
	...	2nd, 6th „	...	B. W.	...	Brothers.
Caedre House, Park Street	...	1st, 1st „	...	W. G.	...	
	...	2nd, 25th „	...	E. M. G.	...	Nursed the above case
4, Station Hill	...	1st, 8th June	...	B. P.	...	
	...	2nd, „ „	...	D. P.	...	Brothers.
89, Park Street	...	1st, 9th „	...	F. R.	...	Sister.
	...	2nd, 2nd July	...	D. J. R.	...	Brother, been ill three weeks.
	...	3rd, 17th „	:	W. R.	...	Father, had been ill three weeks.
11, North Street	...	1st 3rd June	...	G. A.	...	
	...	2nd, 19th „	...	M. A.	...	Brothers.
14, Edward Street	...	1st, 30th „	...	S. B.	...	Mother.
	...	2nd, 14th July	...	T. B.	...	Son.
7, South Street	...	1st, 2nd „	...	O. C.	...	Daughter.
	...	2nd, 22nd „	...	A. D. C.	...	Father.
11, South Street	...	1st, 7th August	...	M. J.	...	
	...	2nd, 16th „	...	F. C.	...	
4, Suffolk Street	...	1st, 11th June	...	B. P.	...	
	...	2nd, 23rd August	...	J. P.	...	
	...	3rd 28th „	...	T. P.	...	
44, Mackworth Street	...	1st, 14th June	...	T. J.	...	Father.
	...	2nd, 14th July	...	J. J.	...	Son,
7, Cheltenham Terrace	...	1st, 9th Sept.	...	M. M.	...	
	...	2nd, 10th Oct.	...	W. M.	...	
14, Cheltenham Terrace	...	1st, 10th „	...	W. M.	...	
	...	2nd, „ „	...	J. M.	...	
	...	3rd, „ „	...	M. T.	...	

Eighteen houses in which more than one case appeared.

Twenty-one Secondary cases. The Secondary cases were 18 per cent. of the total cases.

The reports of the milk analyses made were fairly satisfactory. Inspection was made of the dairy farms supplying the town, with fairly satisfactory results.

As regards the results of water analyses:—

Of two samples taken 6th June from

1.—Tap at Council Offices—

Typical B. Coli present in 2 c.c. Absent from 1/10th and $\frac{1}{2}$ c.c.

2.—Gas and Water Company's mains—

Typical B Coli in 10th c.c.

Of three samples 29th June from

1.—The Source, non-filtered, Schwyl—

A—typical B. Coli in $\frac{1}{2}$ c.c. and 2 c.c.

(Non-indol producing B. Coli.)

2.—Service tank on mountain reservoir, filtered, Schwyl—

A—typical B. Coli in 10 c.c.

(Non-indol producing B. Coli.)

3.—Bridgend Tap, filtered and as supplied—

A—typical B. Coli in 10 c.c.

(Non-indol producing.)

The two latter show an improvement on No. 1 with a diminution in coli-like organisms.

Also the non-filtered water of the 29th shows improvement as compared with that of the 6th, especially with sample 2 from the Water Company's mains.

It would appear that the water at the source had, in some way, been freed from pollution at some date between the 6th and the 29th and preceding the introduction of the process of filtration.

Contrast between the Water Analyses of Dr. Klein, Dr. Thresh, and County Analyst:—

A, the Source; B, the Service Reservoir; C, Water Co's Tap.		
Dr. Klein, 27th Sept.		1st, Sept. County Analyst.
<i>a.</i> 128 microbes per c c.	A.	<i>a.</i> 220 microbes per c.c.
<i>b.</i> 4 Bacillus Coli per c c.		<i>b.</i> 2 B Coli per c.c.
<i>c.</i> No Streptococci, no B. enteritidis, nor sporogenes		<i>c.</i> Not stated.
B.		
<i>a.</i> 120 microbes per c.c.		<i>a.</i> 960 microbes per c.c.
<i>b.</i> B. Coli in 10 c.c.		<i>b.</i> B Coli per 10 c c.
<i>b.</i> Not in 1 c.c.		<i>b.</i> coli (non-idol forming) per 2 c.c.
<i>c.</i> The same as <i>c</i> of A.		<i>c.</i> Not stated.
C.		
<i>a.</i> 20 microbes per c c.		<i>a.</i> 760 microbes per c.c.
<i>b.</i> B. Coli per 10 c.c.		<i>b.</i> B. Coli per 10 c.c.
<i>c.</i> The same as <i>c.</i> of A.		<i>c.</i> Not stated.

Dr. Klein's report fractionally worse as regards number of B. coli per c.c.

County Analyst's definitely worse as regards number of micro-organisms.

Dr. Thresh, 28th June, 1905.

- C.
- a.* 155 organisms per 1 c.c.
 - b.* Not true B Coli in 20 c c.
 - c.* Spores of B. Enteritidis and Sporogenes absent up to 500 c.c.

As compared with C. of Dr. Klein and County Analyst:—

- a.* gives an intermediate number between the two estimates.
- b.* contradicts the other two as to the character of the bacillus, and estimates their number at half.
- c.* is virtually in agreement with Dr. Klein.

The situation of the infected houses whether above or below a certain sea-level, also whether on gravel, or on lias, or whether the cases determined among the more recent or the older inhabitants was taken into consideration with negative results.

In my previous report of the 9th June "I was inclined to attribute the outbreak to the excessive dryness of the early months of the year, indirectly leading, in some way to the specific pollution of food"; while not excluding suspicion of the water as being a cause.

Rain during the first fortnight in June and again on the 19th and 20th with a diminution of fresh cases notified about the middle of July would tend, apparently, to strengthen that hypothesis.

Several good friends of the district volunteered, more or less useful, suggestions towards the solution of the problem of the cause of the continued prevalence of Enteric Fever at Bridgend. These have all been carefully considered and to some extent made use of.

I myself incline to the belief that underground water may be the cause of the pollution of the Schwyl springs, the source of the town water supply.

The gathering ground of these springs is the Ogmere Down; this is composed of carboniferous limestone. This carboniferous limestone is traversed by numerous fissures. The result of this is that the bulk of the rain that falls upon its surface is carried away in underground streams, while the valleys like Pant St. Bride's are often entirely dry. This valley extends so far as the village of St. Bride's Major. This village suffers from deficient water supply which in dry summers fails entirely. To obviate this some years ago a well was sunk in the middle of the village, at a cost of about £100, but on analysis of the water the chemical results proved unsatisfactory.

Also there are one or two privy cess-pools in this village; when these require cleansing, a cart-load of water is emptied in, and the content of the cess-pool being stirred up, everything disappears through fissures in the limestone to the satisfaction of the experimenters.

Another valley, the Alum, contains a stream which flows through agricultural land, from near Colwinston a village in the Cowbridge Rural District; this stream in dry summers disappears into the ground soon after passing Groes Cwitta and may possibly be a tributary to the springs at Schwyl.

The accumulation of underground waters often gives rise to very large springs; some of these like Schwyl pool, from which the water supply of Bridgend is obtained, are constant in their flow, while others are intermittent. It is not difficult to imagine that sewage from places, or dwellings, situate upon this formation may pass down through these fissures and so reach the springs without having undergone any filtration from the soil. The nature of the rock from which it flows seems sufficient to account for the possibility of the pollution that is observed, and may have existed for many years at Schwyl springs.

Might this be the cause, or one of the causes, of the endemic fever to which Bridgend is subject?

But where does the specific pollution come from that gives rise to Enteric Fever at Bridgend?

I am not aware of there having been any cases on the gathering ground of these springs. Again Southerndown has been supplied with the same water for three years, yet no case of Enteric Fever has resulted from its consumption by about 120 residents and by perhaps more than double that number of visitors during two or three months in the summer.

This village should give a control experiment as to the effect of drinking the water from this source; yet it may be that the habit of tea drinking, so that the water is not drunk un-boiled, may vitiate the evidence.

I beg strongly to urge the Council to have the following suggestion, made in my report for 1903, carried out:—

It would be highly interesting and instructive if Dr. Bulstrode's Chart showing the notifications and deaths from Enteric Fever in Bridgend from 1894 to 1902, should be carried forward from year to

year, as they pass, in order to show whether our hopes from the results of the completion of the sewerage and the construction of the filter beds, be fulfilled.

ERYSIPELAS.

One death was recorded from Erysipelas, as compared with none in 1904, 1 in 1903, none in 1902, 5 in 1901, and 1 in 1900.

The death-rate was 0.14 per 1,000; 0.0 in 1904; 0.15 in 1903.

The cases reported were 8, as compared with 4 in 1904, 3 in 1903, 5 in 1902, 12 in 1901, and 1 in 1900.

The case-fatality was 12.5 per cent.; 0 per cent. in 1904; 33 per cent. in 1903.

The case-prevalence was 1.13 per 1,000; 0.60 in 1904; 0.45 in 1903.

PUERPERAL FEVER.

There was no death from Puerperal Fever, as compared with no death in 1904, no death in 1903, no death in 1902, 1 in 1901, and no death in the intervening years until 1 in 1892.

No cases were notified: none in 1904, none in 1903, and none in 1902, 1 in 1901, and 1 in 1900.

The deaths and cases in previous years of the above notified diseases will be found in Table VIII. and VIIIA.

DIARRHŒA.

One death was caused by diarrhœa (under one year of age), as compared with 11 in 1904, 1 in 1903, 3 in 1902, 4 in 1901, and 3 in 1900.

The death-rate was 0.14 per 1,000; 1.64 in 1904; 0.15 in 1903.

The rate for England and Wales was 0.59.

The rate for the Smaller Towns was 0.57.

WHOOPING COUGH.

Three deaths were due to Whooping Cough, as compared with 2 in 1904, 1 in 1903, none in 1902, 4 in 1901, and 1 in 1900.

The death-rate was 0.42; 0.29 in 1904; 0.15 in 1903.

The rate for England and Wales was 0.25. For the Smaller Towns the rate was 0.23.

The deaths of these two diseases in previous years may be seen in Tables VIII. and VIIIA.

EPIDEMIC INFLUENZA.

Two deaths were attributed to Influenza, as compared with 3 in 1904, 3 in 1903, none in 1902, 1 in 1901, and 2 in 1900.

The death-rate was 0.28; 0.45 in 1904; 0.45 in 1903.

The deaths from Influenza in previous years and their prevalence per 1,000 of population can be found in Tables IX. and IXA. Influenza was most prevalent in the first quarter of the year.

SCHOOL CLOSING.

The Council School, the National, and the Catholic were closed on account of Epidemic Measles for six weeks during June.

WATER SUPPLY.

DESCRIPTION OF NEW WORKS.—The construction of a storage reservoir and filter beds on the Ogmores Down for the Bridgend Gas and Water Company has been completed, and the works have been handed over to the Company within the time-limit—twelve months—laid down in the contract. The company, having previously had the filter beds, etc., thoroughly cleaned by numerous and copious washings, commenced to supply the town with filtered water, 20th June. The new works, which have been constructed at an elevation of 270 feet on a site adjoining the common at Flemingsdown—two and a half miles from Bridgend—have cost the company something like £8,000. Under the old arrangement the water was pumped direct to the town from the Schwyl springs, which issue from the carboniferous limestone near the

the Schwyl pool on the banks of a mill-race immediately before it rejoins the river Ewenny. In future, however, it will be pumped through a 9-in. main pipe into the new receiving tank, measuring 160ft. by 114ft. by 13ft. 6in. deep, situate half a mile away. The water then passes through the filter beds, which are of sufficient capacity to adequately filter enough water to meet the requirements of the town, and thence into a covered tank 60ft. long, 40ft. wide, and 12ft. 6in. deep. From this tank the water is delivered into the 8in. main pipe for the supply of the district. The capacity of the storage reservoir is 1,250,000 gallons, the old reservoir—that at the Brackla—being capable of holding but half a million gallons. The whole of the work is constructed in cement concrete. The directors of the Company are erecting additional pumping plant of modern description. The present plant will be reserved for use in cases of emergency. The only pumping necessary will be from the springs to the reservoir; the water will flow to the town by gravitation. The Bridgend Gas and Water Company was incorporated by Act of Parliament in 1869, and water was first delivered into the town by the Company on August 3rd, 1872, and by October of that year the public supply was regularly established. The company erected two reservoirs, one at Brackla and another at Newcastle Hill, which have been in use until the present time. The directors have for many years been contemplating the construction of a reservoir on Ogmores Down, recognising that sooner or later the requirements of the town would necessitate this. In 1902 the manager prepared a scheme, and the directors subsequently negotiated with the Duchy of Lancaster as to a suitable site. When the arrangements were practically complete, however, the commoners interfered, and their claims for loss of pasturage compelled the company to abandon the scheme in that form. The difficulty necessitated a delay of about 12 months. In 1903 the directors secured the freehold of a suitable site near the common, upon which the new works have been constructed.

The water supply, as usual, is plentiful.

THE SLAUGHTER HOUSES.

Dr. Bulstrode holds that "the accommodation afforded by the slaughter-house is far from satisfactory, and some of the butchers complained on the subject, at the same time expressing a wish that a public abattoir, properly administered, should be provided." As I have previously stated, with this opinion I coincide cordially.

COMMON LODGING HOUSES.

There is only one of these—in Newcastle: the one in the Rhiw, Oldcastle, having been closed.

SEWERAGE.

The sewerage of the area within the district is now completed. The whole of the house-drains have been connected to the new sewers.

GENERAL CONDITIONS.

The general state of the district ought to be much improved by the completion of the sewerage works and filtration of the water; still there were 117 cases of Enteric Fever in the year.

Twenty-seven new houses have been erected—19 in Oldcastle, and 8 in Newcastle; and 6 were closed as "unfit."

Ten were in course of erection—7 in Oldcastle, and 3 in Newcastle.

In 1903, 1,355 houses were occupied; in 1904 there were 1,372, an increase of 17; in 1905, 1,433, an increase of 61. Fifty-two are vacant.

The dwellings on the South and East sides of The Square, Newcastle, should be closed as unfit for occupation.

1, 2, 3, 4 Water Street should be closed as unfit for occupation. Also the two dwellings on the Old Bridge, a part of the Bear Hotel, and an old house at the corner of Ewenny Road and Coychurch Road,

The road to Australian Terrace is still unmade.

The regulations under the Dairies, Cowsheds, and Milk-shops orders are enforced.

The Bake-houses, Factories and Workshops have been inspected, reported upon, and improvements effected.

PHTHISIS.

Houses are now disinfected after the removal of persons suffering from Phthisis, if the Sanitary Inspector is informed of the case.

PUBLIC IMPROVEMENTS.

See Inspector's Report. Page 29.

REQUIREMENTS.

- 1.—The re-appointment of the Additional Sanitary Inspector.
- 2.—The closing or the repair of the dwellings named above.
- 3.—Covered iron receptacles for the removal of, and an incinerator for the destruction of infected excreta.

The Isolation Hospital has not yet been opened for use.

Through the kindness of Mr. W. A. Whitton, of the County School, I am enabled to introduce in my Report the following interesting notes of the details of Rainfall, etc., at Bridgend for the year 1905.

I beg to remain, Gentlemen,

Yours faithfully,

WYNHAM RANDALL,

Bridgend,
12th March, 1906.

Medical Officer of Health.

Factory and Workshop Act.

1. INSPECTION.—WORKSHOPS (including Workshop Laundries):
83.
2. DEFECTS FOUND.—Want of Cleanliness, 6; Remedied, 6.
Section 22 of the P.H. Acts Amendment Act, 1890, has been adopted. Breach of special sanitary requirements for bake-houses: Found, 3; Remedied, 3. Total, 9.
3. OTHER MATTERS.—Workshops on the Register at the end of the year: Workshops, 56; Bakehouses, 12—Total, 68.

Meteorological Observations, 1905.

Month.	BAROMETER.			THERMOMETER.					HYGROMETER.		Rainfall. Inches.	
	Highest. Date. Inches.	Lowest. Date. Inches.	Mean of Month. Inches.	Highest Maximum. Date. Degr's.	Lowest Minimum. Date. Degr's.	Mean of Max. Degrees	Mean of Min. Degrees.	Mean of Mean Degrees.	No. of Days be- low 32°	Mean of Dry Bulb. Degrees.		Mean of Wet Bulb. Degrees.
January ...	28 30.99	17 29.22	30.27	5, 7, 25 51.5	27 21.5 Readings.	44.1	34.2	39 15	12	...	...	1.27
February ...	3 30.31	15 28.79	29.70	22 No 62.5	4 29.5	53.0	38.9	45.95	2	47.7	45.6	3.27
March ...	1 30.30	30 29.20	29.82	14, 15 60.0	15 29.0	54.2	40.8	50.40	1	49.3	48.4	5.97
April ...	5 30.44	1 29.29	30.14	14 76.5	10 30.0	63.6	40.3	51.95	2	56.0	50.8	0.26
May ...	22 30.41	29 29.68	29.93	26 80.0	14 40.0	69.9	55.5	62.70	0	62.2	58.6	2.65
June ...	29 30.30	1 29.85	30.09	9 79.0	7 44.5	71.3	54.5	62.90	0	66.1	62.3	2.59
July ...	12 30.35	4 29.32	29.87	12 79.0	21 42.0	68.9	52.6	60.75	0	66.0	60.3	4.10
August ...	29 30.85	7 29.53	30.04	6 68.0	26 36.5	62.5	47.4	54.95	0	53.1	50.6	2.75
Septemb'r ...	11 30.53	3 29.19	30.07	10 63.0	5 23.0	54.6	37.0	45.80	9	45.9	47.8	2.23
October ...	21 30.18	13 29.02	29.67	5, 12, 26 53.0	20 20.0	48.5	34.6	42.55	11	41.2	39.8	4.79
November ...	12 30.86	29 29.36	30.21	7 53.0	10 28.0	46.8	35.8	41.3	6	42.0	40.9	2.98

Annual Report of the Inspector of Nuisances.

Surveyor's Office, Bridgend.

TO THE BRIDGEND URBAN DISTRICT COUNCIL.

GENTLEMEN,

I beg to submit for your consideration my Thirteenth Annual Report of the Sanitary work executed under your authority during the year ending December, 1905.

NEW HOUSES.

Twenty-seven new houses have been erected and the drains were tested before they were erected and the drains were tested before they were certified fit for habitation.

SLAUGHTER HOUSES.

The Slaughter-houses have been systematically inspected, and there is a considerable improvement as to the manner in which they are cleansed.

DAIRIES AND COWSHEDS.

Fourteen persons are registered as Cowkeepers, Dairymen, and Purveyors of Milk. Those inside the District have been inspected several times and found to be kept satisfactorily. In one case a cowshed was occupied without being registered; the building was insufficiently lighted and ventilated. After threatening proceedings, the cowkeeper discontinued to use it as such.

INFECTIOUS DISEASES.

In all cases of Infectious Disease notified the houses were inspected. Leaflets with instructions as to isolation, disinfection, etc., were left, disinfectant supplied, and the drains flushed. Ninety-seven rooms, with clothing, bedding, etc., were disinfected with formalin gas. In five cases it was found necessary to destroy the bedding. During the period of Enteric Fever the sewers were thoroughly flushed; the streets were watered with a mixture of disinfectants.

Twenty Samples of Water were sent for Analysis; Six Samples of Milk were also sent for analysis.

ACTION TAKEN FOR ABATEMENT OF NUISANCES.

Total number of houses inspected 233.

Drains of 113 houses were tested, and 45 were found sound.

41 New Drains were tested.

196 Preliminary Notices have been served for abatement of Nuisances.

12 Legal Notices have been served for the abatement of nuisances.

5 Legal Notices have been served for the provision of new drains.

5 Legal Notices have been served for the provision of efficient water closets.

6 Legal Notices have been served under the Housing of the Working Classes Act, 1890.

67 Choked House Drains have been cleared.

68 Defective House Drains have been reconstructed.

6 New Drains have been provided and connected to the sewers.

31 Inspection Chambers have been built.

6 New w.c.'s provided and furnished with flushing cistern.

6 Houses Draining into Cesspools connected with sewer.

27 Defective Gully Traps replaced with new.

39 Choked w.c.'s cleared from obstruction.

45 w.c.'s provided with water supply.

31 other nuisances and offensive accumulations abated.

6 Houses have been closed voluntarily as unfit for habitation.

7 Houses Unfit for Habitation have been repaired and are now occupied.

7 Houses closed the previous year have been rebuilt and a Justices' Order obtained to open them.

A length of 260 feet of 9-in. Relief Sewer has been constructed at the Rhiew.

A length of 270 feet of 12-in storm water sewer has been constructed at Coity Fields.

I am, Gentlemen,

Your obedient Servant,

M. WILLIAMS,

Surveyor and Inspector of Nuisances.

March 12th, 1906.

*Sanitary Inspector's Summary for the period July—
December 31st, 1906.*

Inspections made, Defects, &c., found.

No. of Complaints received, 38 ; Houses inspected, 241 ; Inspections to Works in hand, 414 ; House Drains tested, 241 ; House Drains found defective, 224 ; House Drains found sound, 17 ; House Drains re-tested, 271 ; Drains found choked, 25 ; Defective traps, 30 ; Rain water pipes connected to drains, 12 ; Drains insufficiently ventilated, 7 ; Defective vent pipes, 49 ; Defective soil pipes, 4 ; Improper covers to inspection chambers, 18 ; Defective w.c. pans, 35 ; Defective w.c. syphons, 17 ; w.c.'s without flushing tank, 2 ; Houses with structural defects, 48 ; Defective shuttes and rain water pipes ; 25 ; Houses with insufficient paving in yards, 27 ; Houses with defective paving in yards, 108 ; Lots of poultry improperly kept, 20 ; Dirty yards and foul accumulations, 42 ; Stables without proper manure pits, 6 ; Other Nuisances, 11 ; Houses with infectious diseases during 1905, 36 ; Defective flushing tanks, 43 ; Animals improperly kept, 11.

Preliminary Notices Served.

To clear choked drains, 30 ; to repair defective drains, 224 ; to provide gulley traps, 30 ; to disconnect rain water pipes from drains, 12 ; to ventilate drains, 7 ; to repair defective vent pipes, 49 ; to repair defective soil pipes, 4 ; to provide inspection chambers, 41 ; to provide sealed covers to inspection chambers, 60 ; to fix new w.c. pans, 35 ; to provide new w.c. syphons, 17 ; to provide flush tanks, 2 ; to repair and provide flush tanks with water, 48 ; to clean out closets and privies, 25 ; structural defects, 48 ; to provide paved areas, 27 ; to repair paved areas, 108 ; to remove foul accumulations, 4 ; to remove poultry, 20 ; to provide manure pits, 6 ; bye-law notices to remove ashes and refuse, 39 ; other nuisances, 11 ; to abate nuisances from the keeping of animals, 11.

